

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 February 2001 (08.02.2001)

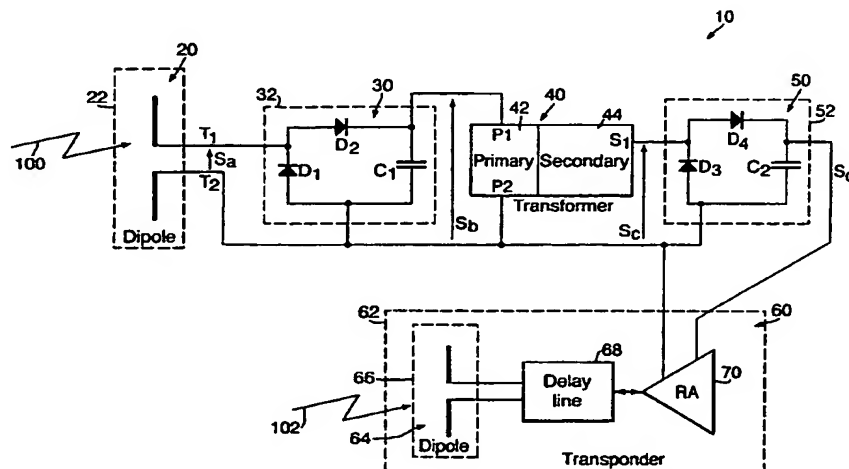
PCT

(10) International Publication Number
WO 01/09640 A1

- (51) International Patent Classification⁷: **G01S 13/02**, **G06K 19/07**
- (21) International Application Number: **PCT/GB00/02944**
- (22) International Filing Date: **31 July 2000 (31.07.2000)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
9917856.8 29 July 1999 (29.07.1999) **GB**
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, BL, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- With international search report.
 - Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

[Continued on next page]

(54) Title: **PIEZO-ELECTRIC TAG**



(57) Abstract: The invention provides a piezo-electric tag (10, 300) in the form of a card, the tag (10, 300) incorporating a first dipole antenna (20), a first rectification circuit (30), a piezo-electric transformer (40), a second rectification circuit (50) and a transponder circuit (60). In operation, the antenna (20) receives incoming radiation and generates a corresponding signal S_a which propagates to the first circuit (30) which demodulates and filters it to generate a signal S_b . The signal S_b is applied to the transformer (40) to excite it. The transformer (40) increases the voltage amplitude of the signal S_b by generating a relatively higher voltage amplitude signal S_c which is used in the tag (10, 300) to generate a signal S_d for supplying power to the transponder (60). The transformer (40) provides voltage magnitude enhancement to generate potentials suitable for operating active electronic circuits incorporated into the tag (10, 300). The tag can be personnel wearable and even adapted for permanent inclusion into biological systems.

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